

What is claimed is:-

1. Apparatus for treating organic waste, comprising an anaerobic digester for receiving organic waste, an aerobic digester, and means for pumping effluent from the anaerobic digester to the aerobic digester, the digesters each comprising a reaction vessel and each reaction vessel having a spray nozzle at or adjacent to its upper end for spraying an anti-foam liquid at the contents of the vessel.
2. Apparatus as claimed in claim 1, wherein the aerobic digester further comprises Venturi mixer for mixing effluent in the reaction vessel with air, means for pumping effluent in the vessel through the Venturi mixer, means for measuring the organic content of the effluent fed into the vessel and means for varying the flow rate at which the effluent is pumped through the Venturi mixer according to the volume and organic content of the effluent fed into the vessel.
3. Apparatus as claimed in claim 2, further including means for monitoring the temperature of the effluent in the reaction vessel and means for increasing the quantity of effluent fed into the vessel over a given period and/or increasing the flow rate at which the effluent is pumped through the Venturi mixer if said temperature falls below a predetermined value.
4. Apparatus as claimed in claim 1, wherein the anaerobic digester comprises a mixing chamber and means for recycling gas produced at or adjacent to the

upper end of the reaction vessel into the lower end of the vessel.

5. Apparatus as claimed in claim 4, wherein the recycling means comprises a recycle pump and a nozzle at or adjacent to the lower end of the vessel.

6. Apparatus as claimed in claim 4, wherein the anaerobic digester further comprises a settlement tube to increase the retention time of solids in the vessel.

7. Apparatus as claimed in claim 1, further comprising a reverse osmosis device downstream of the aerobic digester and/or anaerobic digester.

8. A method of treating organic waste comprising the steps of:

- a. feeding the organic waste into an anaerobic digester.
- b. feeding and mixing the waste in the digester contents in a predetermined controlled cycle.
- c. pumping effluent from the anaerobic digester to an aerobic digester.
- d. mixing the organic waste in the aerobic digester with air by pumping the organic waste through a Venturi mixer which draws air into the organic effluent.
- e. measuring the organic content of the effluent fed into the aerobic digester, and
- f. varying the flow rate at which organic waste is pumped through the

Venturi mixer according to the volume and organic content of the sludge fed into the aerobic digester, and

g. spraying an anti-foam liquid at the contents of both of the digesters.

9. A method as claimed in claim 8, wherein the anaerobic digester includes a settlement tube to increase the retention time of solids in the vessel.

10. A method as claimed in claim 8, wherein the effluent from the aerobic digester is pumped into a reverse osmosis device.

11. A method as claimed in claim 10, wherein the clean effluent extracted from the reverse osmosis device is used to dilute the organic waste fed into the anaerobic digester.

12. A method as claimed in claim 10, wherein the clean effluent extracted from the reverse osmosis device is used to provide clean effluent discharge to provide an effluent of a more exacting standard.